

A. D. No. 6-11
Effective Date: Current
Reviewed Date: _____
County Administrator
Approved: Yes

**PINELLAS COUNTY
ADMINISTRATIVE DIRECTIVE**

ENERGY AND WATER MANAGEMENT

SUMMARY:

County organizations, independent agencies and constitutional offices occupying County-owned and County-leased facilities shall operate per this directive. This directive establishes temperatures set points for seasonal conditions. In addition, this directive requires Real Estate Management to optimize occupancy, conduct energy audits, evaluate utility conservation projects and to construct LEED compliant buildings and work towards County “GREEN” sustainability goals.

County organizations, independent agencies and constitutional offices are required to assist with communicating this directive, develop a management plan to specifically address operational controls under their purview and enforce this directive. At a minimum, the management plan should address the daily shutdown of equipment (computers, monitors, printers, copiers, coffee pots, etc.), area lighting and the use of refrigerators, microwaves and portable space heaters. Please refer to the directive for guidance.

Real Estate Management is responsible to track utility consumption and has benchmarked building operations. Periodic consumption and trending reports will be provided to track the success of your organizational efforts.

**DOCUMENT:
ENERGY AND WATER MANAGEMENT DIRECTIVE**

Issued by
Real Estate Management

ENERGY AND WATER MANAGEMENT DIRECTIVE

SUPERSEDES: May 31, 1991

DEFINITIONS:

County Owned and Leased Buildings - Include lobbies, offices, garages, warehouses, storage areas, laboratories, mechanical/electrical rooms, hallways, elevators, stairways, landings, rest rooms, and entrance areas.

PROCEDURE:

1.0 Introduction

- 1.1 The purpose of the Energy and Water Management Directive is to establish the framework to; promote and incentivize energy and water reduction goals and objectives, identify and implement energy and water conservation activities and identify/establish required resources.
- 1.2 The intent is to reduce energy and water consumption, not reduce energy and water costs. Energy and water costs are variable, but are projected to increase over time. Activities implemented to reduce energy and water consumption now will immediately result in utility cost savings. If a continued effort is not made to reduce utility consumption, future cost increases will adversely affect savings from previous years.

2.0 Scope

- 2.1 This directive is intended to include County-owned and operated buildings/facilities and leased facilities where the Board of County Commissioners is responsible to pay for utilities.
- 2.2 Energy and water utility services include electric, natural gas, water, sewer and non-vehicular fuel oil.

3.0 Codes and References

- 3.1 Federal Energy Policy Act of 2005
- 3.2 Pinellas County Energy and Water Management Program

4.0 Staffing Responsibilities

4.1 The Board of County Commissioners (BCC)

- 4.1.1. Provide safe and comfortable facilities for Appointing Authorities, Elected Officials, Courts and BCC departments to conduct County business.
- 4.1.2. Final budget approval for Utility Services line item in Real Estate Management Department Budget.
- 4.1.3. Utility service costs are currently budgeted and paid by the Real Estate Management Department under the County Administrator.

4.2 Appointing Authorities, Elected Officials, Courts

- 4.2.1 Commit to and support this directive.
- 4.2.2 Educate management and employees as to the purpose, goals and objectives for this directive.
- 4.2.3 Enforce this directive.

4.3 BCC Department Directors

- 4.3.1 Commit to and support this directive.
- 4.3.2 Educate management and employees as to the purpose, goals and objectives for this directive.
- 4.3.3 Enforce this directive.

4.4 Real Estate Management Department (REMD)

- 4.4.1 Develop and submit Utility Services Operating and energy-related Capital Improvement Projects (CIP) Budgets for BCC approval
- 4.4.2 Check utility service invoices for accuracy and process for payment.
- 4.4.3 Develop and implement a policy to reduce energy and water consumption.
- 4.4.4 Communicate and educate Appointing Authorities, Elected Officials, Courts, BCC Department Directors and County employees the purpose, goals and objectives of this directive.
- 4.4.5 Review new construction and renovation design and construction documents to confirm Energy Design Standards are incorporated.
- 4.4.6 Engage energy management and/or utility service providers to perform energy audits of County-owned facilities and identify eligible rebates.
- 4.4.7 Make maintenance repair vs. replacement decisions based on asset life expectancy, energy efficiency and life-cycle costs.

- 4.4.8 Monitor, trend and report program and directive activities.
- 4.4.9 Coordinate with Office of Management and Budget to track and report program incentives.
- 4.4.10 Periodically review Energy and Water Management Directive and make revisions, as appropriate.

4.5 Public Works Department

- 4.5.1 Create Energy Design Standards.
- 4.5.2 Coordinate with contracted architects and engineers to incorporate Energy Design Standards with design and construction documents.

4.6 Communications Department

- 4.6.1 Communicate Energy and Water Management Directive.
- 4.6.2 Communicate energy saving tips.

4.7 Purchasing Department

- 4.7.1 Confirm that new mechanical & electrical equipment and appliance purchases that have an Energy STAR Rating.

5.0 Goals

- 5.1 FY14-16: 2% reduction in electric, water/sewer each year.

6.0 Policy

6.1 Operating Practices

6.1.1 Heating, Ventilation and Air Conditioning (HVAC)

6.1.1.1 Thermostat cooling set points during normal work hours are:

- Office: 75-76 degrees Fahrenheit +/- one degree
- Shops and Storage Areas: 76-77 degrees Fahrenheit +/- one degree
- Warehouses and mechanical/electrical rooms: 78-80 degrees Fahrenheit +/- two degrees

6.1.1.2 Thermostat heating set points during normal work hours are:

- Office: 71-72 degrees Fahrenheit +/- one degree

- Shops and Storage Areas: 68-70 degrees Fahrenheit +/- one degree
 - Warehouses and mechanical/electrical rooms: 68-70 degrees Fahrenheit +/- two degrees
- 6.1.1.3 Relative humidity shall be maintained between 40-60%.
- 6.1.1.4 Thermostat cooling set point for non-work hours is 80 degrees Fahrenheit +/- two degrees.
- 6.1.1.5 Thermostat heating set point for non-work hours is 65 degrees Fahrenheit +/- two degrees.
- 6.1.1.6 Where feasible, outside air intake openings shall be closed during non-work hours.
- 6.1.1.7 Special air conditioning exemptions will be given to areas/facilities with special needs such as: server rooms, laboratories, special storage, etc.
- 6.1.1.8 Ventilation systems shall be secured (turn off/shut down) when not in use and hood opening shall be sized to optimize volumetric flow while maintaining safe operating conditions.
- 6.1.1.9 REMD shall coordinate with building occupants to establish work hour and non-work hour schedules.

6.1.2 Lighting

- 6.1.2.1 Lighting in all areas should be secured (switched off) when not in use.
- 6.1.2.2 Lighting selection shall be matched to tasks performed in the area, which shall include fixture/tube selection and number of fixtures per square foot.
- 6.1.2.3 Use of desk task lighting is permitted and encouraged in an effort to reduce increased overhead lighting.
- 6.1.2.4 Exit sign lighting should be light emitting diode (LED) fixture types.
- 6.1.2.5 Exterior lighting should be limited to safety, security and lighted flag poles. Special consideration will be afforded to public art displays.
- 6.1.2.6 Occupancy sensors will be installed in personal offices, conference rooms, break rooms and select open office plans.
- 6.1.2.7 Interior common areas such as hallways, corridors, open office areas, rest rooms and cafeterias will be put on a manual or automatic lighting schedule.
- 6.1.2.8 REMD shall coordinate with building occupants to establish work hour and non-work hour schedules.

6.1.3 Securing the office

- 6.1.3.1 Each employee is responsible to switch off computers, monitors and printers at the end of each day, except for scheduled/specified Information Technology (IT) update days.
- 6.1.3.2 Management, for areas under their direction/administration, is responsible to implement a plan that ensures lighting, copiers, faxes and coffee pots are switched off in work areas.

6.1.4 Prohibited Equipment/Appliances

- 6.1.4.1 Personal space heaters are prohibited in all County facilities.
- 6.1.4.2 With the exception of remote locations, refrigerators, coffee pots and microwave ovens shall be installed in common areas; not personal offices.

6.1.5 Compressed Air Systems

- 6.1.5.1 Compressed air systems shall be operated at the lowest delivery pressure to maintain effective maintenance and system operations.
- 6.1.5.2 New air compressor purchases shall be sized to optimize nominal capacity and delivery pressure and include a high efficiency motors.
- 6.1.5.3 REMD shall develop and implement a semi-annual preventive maintenance activity to leak check compressed air systems. REMD will repair all leaks detected from this activity.

6.2 New Building Construction and Renovations

6.2.1 New Building Construction

- 6.2.1.1 Incorporate Energy Design Standards that consider roofing, interior/exterior lighting, HVAC systems, building controls & security, insulation, rest room fixtures, window construction and interior window treatments.
- 6.2.1.2 Architects and engineers shall consider technologies and standards that promote and achieve 'Green/LEED' building designations.

6.2.1.3 Landscape engineers and designers shall incorporate native plant species and xeriscape into designs. Where irrigation is required, attempts will be made to use reclaimed water or shallow wells. County or municipal water shall be used only as a last resort.

6.2.2 Renovations

6.2.2.1 Incorporate energy design standards that consider roofing, lighting, HVAC systems, building controls & security, insulation, rest room fixtures, window construction and interior window treatments.

6.3 Maintenance Repairs and Replacements

6.3.1 In the areas of light tubes & ballasts, motors, compressors & pumps, roofing, insulation and windows/doors, repair vs. replacement decisions shall be based on asset life expectancy, energy efficiency and life-cycle costs.

6.3.2 Consideration shall be given to high efficiency motors, current lighting energy standards, variable speed motor controls and current R-values in construction materials.

6.4 Energy and Water Retrofit Projects

5.4.1. REMD shall engage energy management and/or utility service providers to perform energy audits of County-owned facilities and identify retrofit projects that have attractive rates of returns.

5.4.2. Examples of retrofit projects include; lighting (light tubes, ballasts and LED exit signs), centralized chilled & condenser water systems, chiller replacements, thermal storage, window film & interior window treatments, rest room fixtures and irrigation.

5.4.3. REMD shall engage utility service providers to identify projects eligible for rebates.

5.4.4. REMD shall investigate financing options to off-set initial capitalization of retrofit projects.

6.5 Equipment Purchases

6.5.1 When available, specify all new mechanical & electrical equipment and appliance purchases that have an Energy STAR Rating.

6.5.2 Life-Cycle Cost Analyses shall be incorporated into evaluation criteria.

7.0 Rebates

7.1 REMD will work with utility service providers to identify and implement eligible rebate projects and programs. All rebates will be re-invested into the Energy and Water Management Program.

8.0 Benchmarking and Reporting

8.1 Monthly Monitoring

8.1.1 REMD will monitor, track and trend utility service consumption on a monthly basis as utility invoices are received and processed for payment and issue a quarterly report to Appointing Authorities, Elected Officials, Courts and other BCC departments.

8.1.2 Monthly monitoring will be used to compile data, report and benchmark for budgeting and incentives.

8.2 Quarterly Reporting

8.2.1 R shall issue a quarterly report budget and year-to-date utility service consumption to Appointing Authorities, Elected Officials, Courts and other BCC departments.

8.3 Policy Review

8.3.1 This directive will be review annually and revised, as appropriate.

COMMENTS: None

AUTHORITY:

Federal Energy Policy Act of 2005

County Administrator – Best management practice to reduce operating costs and maintain building configuration control.